SAN JOSE
CAPITAL OF SILICON VALLEY

CITY OF SAN JOSÉ, CALIFORNIA
Building Division

NOTICE OF VERIFICATION FOR MECHANICAL PLAN REVIEW AND INSPECTION COMPLETION FOR OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT OSHPD 3 REQUIREMENTS

I. CALIFORNIA BUILDING CODE (CBC) 2007 SECTION 1226 [FOR OSHPD 3] – CLINICS

1226.1 Scope:
The provisions of this chapter shall apply to primary-care clinics, specialty clinics and psychology clinics. Primary-care clinics include free clinics, community clinics, employee clinics and optometric clinics. Specialty clinics include surgical clinics, chronic end-stage renal dialysis clinics and rehabilitation clinics.

1226.2 Application:
All new buildings and additions, alterations or repairs to existing buildings subject to licensure shall comply with applicable provisions of the California Electrical Code, California Mechanical Code, California Plumbing Code and California Fire Code (Parts 3, 4, 5 and 9 of Title 24) and this section of the California Building Code.

II. CALIFORNIA MECHANICAL CODE (CMC) 2007

The subject building was inspected for compliance with the 2007 CMC. The following items are CMC requirements for the State Licensed Clinics [OSHPD 3] in addition to other CMC provisions.

Section 315.3.1 Heating and Cooling Requirements:
The system shall be designed to provide the temperature & humidities for sensitive areas or rooms shown in Table 315.

Table 315 – Heating and Cooling

AREA OR ROOM DESIGNATION	TEMPERATURE RANGE [1, 2] °F	RELATIVE HUMIDITY [1, 3] %
Operating room	68-73	30-60
Cystoscopy	68-73	30-60
Cardiac cath lab	70-75	30-60
Delivery room	68-73	30-60
Recovery room	70	30-60
Newborn nursery	75	30-60
Intensive-care newborn nursery	75-80	30-60
Intensive care	70-75	30-60

[1] Thermostats and humidistat shall be either locally resetable and of the non-locking type or remotely resetable and of the locking type.
[2] Where temperature ranges are indicated, the system shall be capable of maintaining the rooms at any point within the range. A single figure-indicates a heating or cooling capacity of at least the indicated temperature. Temperatures different than those shown will be allowed when approved by the AHJ.
[3] The ranges listed are the minimum and maximum limits where control is specifically needed.

CODE SECTIONS	SUBJECTS	REQUIREMENTS
315.3	Outpatient Facilities and Licensed Clinics	The system shall be designed to provide the temperature and humidities for sensitive areas for rooms shown in Table 315.
316.0	Essential Mechanical Provisions	During periods of power outages emergency electrical power shall be provided as required in the following sections for surgical clinics only.
316.1	Heating Equipment, Except Surgical Clinics	All heating equipment necessary to maintain a minimum temperature of 60 deg. F in patient areas which are not specified in Table 315.
316.2	Heating Equipment, Sensitive Areas	All heating equipment necessary to maintain the minimum temperatures for sensitive areas as specified in Table 315.
316.3	Humidification	Equipment necessary for humidification of the areas listed in Table 315.
316.4	Supply, Return and Exhaust Fans	All supply, return and exhaust fans required to maintain the positive and negative air balances as required in Table 4-A.
316.5	Control Components	All control components and control systems necessary for the normal operation of equipment required to have emergency electrical power.
Table 4-A	Mechanical Design	Pressure relationship and ventilation requirements shall comply with this Table.
Table 4-B, 4-C	Filter Efficiencies	Filter efficiencies shall comply with this Table.

405.4	Direct Evaporative Cooling Systems	Where air directly contacts the wetted surface or spray shall be limited to non-patient areas such as laundry rooms, food preparation areas and boiler or machinery rooms. Evaporative pads shall be synthetic. Filters shall be required in accordance with Tables 4-B and 4-C, except utility rooms (boiler or machinery).
407	Ventilation Details	Ventilation Systems shall comply with this Section.
407.1.1	General Air Systems	All supply-air, return-air and exhaust-air systems shall be mechanically operated and such systems for areas listed in Table 4-A shall be operated continuously. Natural ventilation shall be considered supplemental. See section for exceptions.
407.1.2	Exhaust Fans	Exhaust fans shall be located at the discharge end of the system.
407.2.1	Outdoor air intakes	Shall be located at least 25' from exhaust outlets combustion equipment stacks, medical-surgical vacuum systems, cooling towers and areas that may collect vehicular exhaust or other noxious fumes. The bottom of outdoor air intakes shall be located not less than 10' above ground level or 18" above roof level.
407.2.2	Exhaust Outlets	Shall be located a min. of 10' above adjoining grade and 10' from doors, occupied areas and operable windows. Except AIIR- See Section 414.1.
407.2.3	Relief Air Discharge	Building relief air shall discharge shall be at least 10 feet from any OSA intake.
407.3.1	Air Balance	Ventilation systems shall be designed and balanced to provide the general air balance relationship to adjacent areas as shown in Table 4-A.
407.3.2	Static Pressure Drop	Where the variation in static pressure drop across filters is a significant portion of the of the total pressure drop, controls or constant volume devices may be required to ensure the air balance relationships as shown in Table 4-A.
407.4.1	Circulation	Air shall be introduced at the cleanest areas and removed at the dirtiest areas.
407.4.1.1	Air distribution system for Sensitive Areas	Air supplied to sensitive areas shall be delivered at or near the ceiling of the area served, and all air removed from the area shall be removed near floor level. At least 2 exhaust or recirculation air inlets shall be used in all operating and delivery rooms located between 3" and 8" above the finished floor.
407.4.1.2	Air distribution system for Non-Sensitive Area	Supply-air outlets, recirculation and exhaust air inlets installed in non-sensitive areas shall be located not less than 3 inches above the floor.
407.4.1.3	Corridors	Corridors shall not be used to convey supply, return or exhaust air to or from any room if the corridor is required to of fire resistive construction per the CBC. *Exception #1*- Mechanically exhausted toilet rooms of 50 sqft or less and small rooms of 30 sqft or less, such as a janitors closet, opening directly into corridor. *Exception #2*- Air transfer caused by pressure differentials in rooms required to have a positive or negative air balance by Table 4-A.
407.4.1.4	Air Plenum Restriction	No space above a ceiling or other furred space may be utilized as an air plenum.
407.4.1.5, 407.4.1.6	Air Transfer, Short-Circuiting	Air from a patient, exam or treatment room shall not be transferred to another similar room without first having passed through filters as required by Table 4-B or 4-C. Air inlets and outlets shall be located to prevent short-circuiting.
407.5.1	Variable Air Volume systems (VAV)	Not permitted for Airborne Infection Isolation Rooms or those critically sensitive areas listed in Table 315.
407.5.1.1 407.5.1.2 407.5.1.3	VAV in Non-Sensitive areas	Shall comply with code requirements for OSA, Total Air and pressure relationship through the full range of operation from minimum to maximum. The central return or exhaust fan shall be controlled to accomplish the variable air volume requirements of the individual rooms served by the fan as follows. The return or exhaust air shall be accomplished by utilizing an automatic modulating damper in the return or exhaust air for each zone. The damper will modulate from full open to minimum position in conjunction with the supply-air VAV terminal box.
408	Filters	All filters shall be certified by the manufacturer and installed per CMC.
408.1.1	Filter Gauge	Shall be installed across each filter bank serving central air systems.
408.1.5	Filter Banks (FB)	FB #1 shall be located upstream of the A/C equipment. FB #2 and FB #3 shall be located downstream of the supply fan and all cooling and humidification equipment with efficiencies as indicated in Tables 4-B and 4-C.
409.1 409.2 409.3 & 605 409.4	Ducts	Ducts which penetrate construction, intended for X-ray or other radiation protection, shall not impair the effectiveness of the protection. Duct linings and their use shall meet the requirements of Chapter 6, CMC. Cold-air ducts shall be insulated wherever necessary or to prevent condensation problems. The anchorage and supporting structural elements for airducts shall be designed to withstand the lateral forces as required by the CBC, Title 24, Part 2

410	Laboratories	Fume hood systems shall comply with this Section and the CMC.
411	Kitchen and Dining Areas	Air from dining areas may be used to ventilate the food preparation areas only after it has passed through a filter with at least 80% efficiency per this Section.
412.2	Boiler, mechanical and electrical rooms	Floor surfaces in occupied spaces above such rooms should not exceed a temperature of 85°F, and suitable insulation may be required.
413.1 & 413.2	Odorous Rooms	Shall be provided with exhaust ventilation to change the air a minimum of 10 times per hour and prevent odors from entering patient areas.
414	Airborne Infection Isolation Rooms (AIIR)	Shall comply with the requirements of this section and the CMC.
414.1 414.1.1 414.1.2	Exhaust Systems	A separate, dedicated exhaust system shall be provided for airborne infection isolation rooms. The exhaust fan and ducts shall be identified by appropriate labeling with the words "Caution-Airborne Infection Isolation Rooms Exhaust" or similar terminology. The discharge from exhaust fans shall be located above the roof and 25 feet from openings into the building. Exhaust discharge shall extend at least 7 feet vertically upwards above the roof, or shall discharge through an accessible HEPA filter with a minimum efficiency of 99.97 % installed upstream of the exhaust fan.
414.2	Air Distribution	Supply-air outlets and exhaust inlets shall be located at or near the ceiling and at the end of the AIIR which is opposite the head of the bed. Exhaust registers shall be located on the wall behind the patient's head not less than 3 inches nor more than 24 inches above the finished floor.
415	Protective Environment Rooms (PER)	Shall comply with the requirements of this section and the CMC.
415.1	Air Distribution	Supply-air shall be delivered at or near the ceiling and near the patient's bed. All exhaust or return registers shall be located near the entrance to the protective environment room and not less than 3 inches nor more than 8 inches above the finished floor.
416	Alarms	Shall comply with the requirements of this section and the CMC.
416.1	Alarms- Airborne Isolation Infection Rooms and Protective Environment Rooms	An alarm system which is based on static pressure control, volumetric control, or directional flow measurement shall be provided for each isolation room. The alarm system shall consist of a display monitor located on the corridor wall near the door to the room *and* a visual and audible alarm which annunciates at the room and at the nurse's station or other suitable location that will provide responsible surveillance.
417	Testing AIIR and PER	All mechanical systems shall be tested, balanced and operated prior to acceptance. Testing shall be performed by a qualified independent agency certified by the Associated Air Balance Council (AABC) or the National Environmental Balancing Bureau (NEBB).
418	Ethylene Oxide (ETO) Sterilization Areas	Shall comply with the requirements of this section and the CMC.
418.2, 418.2.2	Exhaust Requirements For ETO	All air shall be exhausted to the outside by a dedicated system and the exhaust fan shall be located at the discharge point of the exhaust system 25 feet from an opening into the building.
418.3	Ventilation Requirements for ETO	Shall comply with the requirements of this section and the CMC.
602.3.1	Flexible Ducts	Flexible ducts of not more than 10 feet in length may be used to connect supply, return or exhaust air terminal devices to rigid duct systems. Where constant volume, variable volume or mixing boxes are used utilized, flexible duct of not more than 10 feet may be used on the inlet side for alignment. An impervious liner shall be provided to isolate insulation material from conditioned air.

The City of San Jose has provided *Mechanical Plan Review* verification under OSHPD 3 requirements, for the clinic located at _____on this date_____ by this plan examiner_____.
The City of San Jose has provided *Mechanical Inspection* verification under OSHPD 3 requirements, for the clinic located at _____on this date_____ by this inspector_____.